



State of Utah

Department of  
Natural Resources

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May 24, 2004

CERTIFIED RETURN RECEIPT  
7099 3400 0016 8896 1218

Mert Hamilton  
Rocanville Stone  
P.O. Box 35  
Delta, Utah 84624

Subject: Initial Review of Notice of Intention to Commence Large Mining Operations, Rocanville Stone, Tejon Quarries, M/027/087, Millard County, Utah

Dear Mr. Hamilton:

The Division has completed our review of your draft Notice of Intention to Commence Large Mining Operations for the Tejon Quarries, located in Millard County, Utah, which was received March 1, 2004. After reviewing the information, the Division has the following comments that will need to be addressed before tentative approval may be granted.

The comments are listed below under the applicable Minerals Rule heading. Please format your response in a similar fashion. **Please address only those items requested in the attached technical review. You may send replacement pages of the original mining notice using redline and strikeout text, so we can see what changes have been made. After the notice is determined technically complete and we are prepared to issue final approval, we will ask that you send us two copies of the complete and corrected plan. Upon final approval of the permit, we will return one copy stamped "approved" for your records. Please provide a response to this review by June 21, 2004.**

# INITIAL REVIEW OF NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS

Rocanville Stone  
Tejon Quarries

M/027/087  
May 19, 2004

## R647-4-105 - Maps, Drawings & Photographs

### **105.3 Drawings or Cross Sections (slopes, roads, pads, etc.)**

The cross-section of the Tejon #1, surface contours after reclamation, states, "Final outer edge may be steeper the 45 degrees."

A variance will need to be requested to leave highwall slopes >45 degrees. (DJ)

All cross-sections showing the surface contours after reclamation indicates that the highwall slopes on all the benches within the quarries will be reduced.

Please state in the plan how this reduction will be accomplished, (resloping with a dozer or backfilling with waste material or combination). Please include the cost of this effort in the surety estimate. (DJ)

The cross-sections show surfaces before and after mining. Please include an additional line showing the surface after final reclamation. (DJ)

## R647-4-106 - Operation Plan

### **106.4 Nature of materials mined, waste and estimated tonnages**

The estimated annual volume of overburden from this mining activity is estimated at 300 tons. The plan states that the amount of overburden at these quarries ranges from 0 to 20 feet and averages 5 feet. If this is correct, the estimated amount of overburden produced each years should be ~16,300 CY. Please correct this number in the revised plan. (DJ)

### **106.5 Existing soil types, location, amount**

Projections indicate that ~ 13,400 CY of growth material will be salvaged during the five years operation. This amount of material will only provide for a total cover of the 6 inches of growth material over the 20 acre affected area. An additional 19,000 CY of overburden should also be stored separately for use during reclamation. This additional material will allow for sufficient material to cover the entire site with a total cover of 12 inches. (DJ)

### **106.6 Plan for protecting & redepositing soils**

As requested, attached is a recommended interim seed mix that would help stabilize the plant growth materials. (LK)



**R647-4-107 - Operation Practices**

**107.1 Public safety & welfare**

**107.1.14 Posting warning signs**

Because of the close proximity of a public road to these quarries, signs warning the public of the hazards of the site should be placed at the entrance of each quarry. (DJ)

**107.1.15 Constructing berms, fences, etc. above highwalls**

Berms, a minimum of 3 feet in height should be placed above the highwalls of each quarry. (DJ)

**107.2 Drainages to minimize damage**

If water diversion or control features need to be constructed because of the location of the storage area in a major drainage, the cost of removal of these items on closure should be included in the surety. (DJ)

**107.6 Concurrent reclamation**

The plan indicates that an unused road on the west side of Tejon #4 will be reclaimed. Please indicate on the appropriate map the location of this road. If this road is a part of the affected area of the mine, reclamation of this feature should be included in the plan and the surety. (DJ)

**R647-4-110 - Reclamation Plan**

**110.2 Roads, highwalls, slopes, drainages, pits, etc., reclaimed**

The plan states that highwalls will be reduced and bench floors will be ripped prior to placement of waste material and growth medium.

Please include the cost of accomplishing these tasks in the surety. (DJ)

Also the plan states that the highwalls and waste dumps will be reduced to a 3:1, to a 2:1, or natural slope.

Unless a variance is requested the highwalls should be reduced to a maximum slope of 2:1 and waste dumps to a maximum slope of 3:1. The plan should state the proposed final slope angle for these features. (DJ)

**110.5 Revegetation planting program**

Before the Division can assess the need for fertilizers or other soil amendments, you will need to provide the results of the soil analysis that was submitted to the BYU Soils lab. Soil amendments/fertilizer (if needed) will be included in the reclamation cost estimate. (LK)

Please provide a reclamation seed mix for use in final reclamation. Include the species to be used and the rate of application. Species selected should have utility for the intended post mining land use of wildlife habitat and sheep grazing. Attached is a recommended

seed mix. If acceptable, please include it as part of your plan. Planting should be done in late October or early November for your site. (LK)

**R647-4-111 - Reclamation Practices**

**111.1 Public safety & welfare**

**1.14 Posting warning signs**

See comment under Rule 107.1.14

**1.15 Constructing berms/fences above highwalls**

See comment under Rule 107.1.15

**111.2 Reclamation of natural channels**

Because storage areas have been constructed in a drainage, restoration of this drainage should be included in the surety estimate. (DJ)

**111.12 Topsoil redistribution**

Please provide a map that shows what areas will receive 6 inches of plant growth materials vs. those areas that will receive 12 inches of plant growth material. Provide the acreage calculations for these respective areas. (LK)

**R647-4-112 – Variance**

No variances were requested.

**R647-4-113 – Surety**

A surety estimate should be calculated for this plan. A blank copy of DOGM's surety calculation sheet has been included with this review, for the operators use. (DJ)

Attachment: Seedmix

Recommended Revegetation Species List  
For Final Reclamation

**Rocanville Stone  
Tejon Quarries  
M/027/087**

<u>Common Name</u>	<u>Species Name</u>	<u>*Rate lbs/ac (PLS)</u>
'Hycrest' crested wheatgrass	<u>Agropyron cristatum</u>	0.5
'Luna' pubescent wheatgrass	<u>Agropyron tricophorum</u>	1.5
Western wheatgrass	<u>Agropyron smithii</u>	1.5
Indian ricegrass	<u>Oryzopsis hymenoides</u>	2.0
Bluebunch wheatgrass	<u>Agropyron spicatum</u>	1.5
'Ladak' alfalfa	<u>Medicago sativa</u>	0.5
Yellow Sweetclover	<u>Melilotus officinalis</u>	0.5
Palmer penstemon	<u>Penstemon palmerii</u>	0.5
Wyoming big sagebrush	<u>Artemisia tridentata wyomingensis</u>	0.1
4-wing saltbush	<u>Atriplex canescens</u>	1.5
Rubber rabbitbrush	<u>Chrysothamnus nauseosus</u>	0.25
Winterfat	<u>Ceretoidea lanata</u>	1.0
Forage Kochia	<u>Kochia prostrata</u>	0.5
<b>Total Seed</b>		<b>11.85 lbs/ac</b>

\* Rate is recommended for broadcast seeding.

**Recommended Revegetation Species List  
For Interim Stabilization**

<u>Common Name</u>	<u>Species Name</u>	<u>*Rate lbs/ac (PLS)</u>
'Hycrest' crested wheatgrass	<u>Agropyron cristatum</u>	1.0
'Piute' orchardgrass	<u>Dactylis glomerata</u>	0.75
'Ladak' alfalfa	<u>Medicago sativa</u>	1.0
Yellow Sweetclover	<u>Melilotus officinalis</u>	0.5
Palmer penstemon	<u>Penstemon palmerii</u>	0.5
Forage Kochia	<u>Kochia prostrata</u>	0.75
<b>Total Seed</b>		<b>4.5 lbs/ac</b>